GINZBURG, Boris et al.

Serial No.:

10/608,143

Attorney Docket No.: P-5751-US

Assignee:

Intel Corporation

REMARKS

Applicants have carefully studied the Office Action. This paper is intended to be fully responsive to all points of rejection and objection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

Status of the Claims

Claims 1-39 are pending in the Application. Claims 1, 13, 25, 30, 35, 36 and 39 have been amended.

Specification

The Examiner objected to the Specification because of two alleged informalities: that page 7, line 25, includes the word "xemplary" instead of "exemplary", and that page 9, line 1, includes the word "tim" instead of timer.

Applicants respectfully disagree.

Applicants respectfully submit that the application as originally filed does not include the typing errors that the Examiner pointed out. The application as originally filed includes the word "exemplary" at page 7, line 25. The application as originally filed includes the word "time" at page 9, line 1.

Applicants would like to point out that the published version of the application, as prepared and published by the United States Patent and Trademark Office as Publication Number 2004/0264396, indeed includes the two typing errors that the Examiner pointed out. However, these errors to not appear in the application as originally filed by the Applicants.

In view of the above, Applicants respectfully submit that no amendments to the application is required, and respectfully request the objection to the specification be withdrawn.

GINZBURG, Boris et al.

Serial No.:

10/608,143

Attorney Docket No.: P-5751-US

Assignee:

Intel Corporation

Amendment of Claims

Applicants have amended claims 1, 13, 25, 30, 35, 36 and 39 to clarify what the Applicants regard as the invention, and to correct minor typographical errors.

No new matter has been added by this amendment.

Claims 1, 13, 25, 30, 35, 36 and 39 have been amended to recite, in paraphrase, transmission during an awake mode of a device one or more data packets sent for transmission during a power save mode of the same device.

Claim 25 has further been amended to explicitly recite a transmitter.

Claim 30 has further been amended by replacing the word "transceiver" with the word "transmitter", to correct an inadvertent typographical error.

Claim 35 has been amended to correct an inadvertent typographical error, such that claim 35 now depends from claim 34, instead of from claim 35.

Claim 39 has been amended by replacing the word "wave" with the word "save", to correct an inadvertent typographical error.

Claim Rejections Under 35 USC §112, Second Paragraph

The Examiner rejected claim 30 under 35 USC §112, Second Paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

Specifically, the Examiner contended that original claim 30 recites "said transceiver", and that there is insufficient antecedent basis for this limitation in claim 30.

Applicants have amended claim 30 by replacing the word "transceiver" with "transmitter". Applicants submit that amended claim 30 meets the requirements of 35 USC §112, Second Paragraph.

In view of the above, Applicants respectfully request that the rejection of claim 30 under 35 USC §112, Second Paragraph, be withdrawn.

The Examiner rejected claims 25-29 under 35 USC §112, Second Paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements.

GINZBURG, Boris et al.

Serial No.:

10/608,143

Attorney Docket No.: P-5751-US

Assignee:

Intel Corporation

Specifically, the Examiner contended the omitted element is a transmitter in the apparatus to transmit the one or more data packets during an awake mode.

Applicants have amended claim 25 by explicitly reciting a "transmitter" to transmit the one or more data packets during an awake mode. Applicants submit that amended claim 25 meets the requirements of 35 USC §112, Second Paragraph.

Claims 26-29 depend from claim 25. Since amended claim 25 recites a "transmitter", this element is included also in claims 26-29 which depend from claim 25. Therefore, Applicants submit that claims 26-29 likewise meet the requirements of 35 USC §112, Second Paragraph.

In view of the above, Applicants respectfully request that the rejection of claims 25-29 under 35 USC §112, Second Paragraph, be withdrawn.

Claim Rejections Under 35 USC §112, First Paragraph

The Examiner rejected claim 29 under 35 USC §112, First Paragraph, as failing to comply with the enablement requirement.

Specifically, the Examiner contended that the specification does not describe the step wherein a disabling unit in an apparatus enables a transmitter during a power save mode.

Applicants respectfully disagree.

The specification as originally filed discloses "The disabling unit may be a separate unit or integrated into another unit, such as a processor. The desired switching "on" or "off" transceiver circuitry and/or other circuits or sub-units associated with the reception and transmission functions of the wireless units may be executed using any method known in the art" (page 7, lines 21-24; emphasis added). Additionally, original claim 29 as filed, which is part of the specification, recites "said disabling unit is able to enable said transmitter during said power save mode". Therefore, Applicants respectfully submit the specification as originally filed disclosed a disabling unit able to enable the transmitter during a power save mode.

GINZBURG, Boris et al.

Serial No.:

10/608,143

Attorney Docket No.: P-5751-US

Assignee:

Intel Corporation

In view of the above, Applicants respectfully submit that claim 29 meets the enablement requirement of 35 USC §112, First Paragraph. Applicants respectfully request that the rejection of claim 29 under 35 USC §112, First Paragraph, be withdrawn.

Claim Objections

The Examiner objected to claim 35 because of an informality, since claim 35 cannot depend from claim 35. Claim 35 has been amended to depend from claim 34, instead of from claim 35.

The Examiner objected to claim 39 because of an informality, since claim 39 recites a "power wave mode". Claim 39 has been amended to recite, instead, a "power save mode".

In view of the above, Applicants respectfully request that the objection to claims 35 and 39 because of informalities be withdrawn.

Claim Rejections Under 35 USC §102(e)

The Examiner rejected claims 1-3, 5-6, 10-11, 13-15, 17-18 and 22-23 under 35 USC §102(e) as being anticipated by Larsson et al., United States Patent Number 6,463,307 ("Larsson").

Specifically, the Examiner contended that Larsson describes transmitting during an awake mode data packets sent for transmission during a power save mode.

As is well established, in order for a claim to be anticipated by the prior art, each and every element and feature of the claim must be included in a single prior art document.

Each of amended independent claims 1 and 13 recites, inter alia, "transmitting during an awake mode of a wireless communication device one or more data packets sent for transmission during a power save mode of said wireless communication device" (emphasis added). Larsson does not disclose, teach or suggest at least this feature of independent claims 1 and 13.

Specifically, Larsson describes an access point which buffers data packets while a remote mobile terminal is hibernating (Larsson, column 4, lines 48-66; column 5, lines 4-

GINZBURG, Boris et al.

Serial No.:

10/608,143

Attorney Docket No.: P-5751-US

Assignee:

Intel Corporation

10). Therefore, Larsson describes, at most, a first wireless communication device (access point) which buffers data packets while another, different, wireless communication device (remote mobile terminal) hibernates. In contrast, independent claims 1 and 13 relate to a wireless communication device able to transmit, during its own awake mode, data packets sent for transmission during its own power save mode.

In view of the above, Applicants respectfully submit that each of amended independent claims 1 and 13 meets the novelty requirements of 35 USC §102(e). Applicants respectfully request that the rejection of claims 1 and 13 under 35 USC §102(e) be withdrawn.

Applicants respectfully submit that the above-mentioned distinctions of amended independent claims 1 and 13 are significant and would not have been obvious at the time the invention was made to a person having ordinary skill in the art, in view of any of the references on record, alone or in combination. Therefore, while the Examiner has not made such a rejection, Applicants respectfully submit that amended independent claims 1 and 13 meet the patentability requirements of 35 USC §103.

Claims 2-3, 5-6 and 10-11, and claims 14-15, 17-18 and 22-23 are dependent from amended independent claims 1 and 13, respectively, and include all the features of these amended independent claims as well as additional distinguishing features. Therefore, it is respectfully submitted that the novelty and patentability of claims 2-3, 5-6 and 10-11, and claims 14-15, 17-18 and 22-23, follow directly from the novelty and patentability of amended independent claims 1 and 13, respectively.

In view of the above, Applicants respectfully request that the rejection of claims 1-3, 5-6, 10-11, 13-15, 17-18 and 22-23 under 35 USC §102(e) be withdrawn.

The Examiner rejected claims 25-29 under 35 USC §102(e) as being anticipated by Beach et al., United States Patent Application Publication Number 2004/0072588 ("the '588 Publication").

Specifically, the Examiner contended that the '588 Publication describes an apparatus comprising a buffer to store data packets during a power save mode and to transmit the data packets during an awake mode.

GINZBURG, Boris et al.

Serial No.: 10/608,143 Attorney Docket No.: P-5751-US Assignee:

Intel Corporation

Independent claim 25 recites, inter alia, "a buffer to store one or more data packets during a power save mode of said apparatus; and a transmitter to transmit said one or more data packets during an awake mode of said apparatus" (emphasis added). The '588 Publication does not disclose, teach or suggest at least this feature of independent claim 25.

Specifically, the '588 Publication describes an access point which buffers data packets while a mobile unit is in a power save mode (the '588 Publication, paragraphs 0005 and 0006). Therefore, the '588 Publication describes, at most, a first wireless communication device (access point) which buffers data packets while another, different, wireless communication device (mobile unit) in a power save mode. independent claim 25 relates to an apparatus able to transmit, during its own awake mode, data packets sent for transmission during its own power save mode.

In view of the above, Applicants respectfully submit that amended independent claim 25 meets the novelty requirements of 35 USC §102(e). Applicants respectfully request that the rejection of claim 25 under 35 USC §102(e) be withdrawn.

Applicants respectfully submit that the above-mentioned distinctions of amended independent claim 25 are significant and would not have been obvious at the time the invention was made to a person having ordinary skill in the art, in view of any of the references on record, alone or in combination. Therefore, while the Examiner has not made such a rejection, Applicants respectfully submit that amended independent claim 25 meets the patentability requirements of 35 USC §103.

Claims 26-29 are dependent from amended independent claim 25, and include all the features of amended independent claim 25 as well as additional distinguishing features. Therefore, it is respectfully submitted that the novelty and patentability of claims 26-29 follow directly from the novelty and patentability of amended independent claim 25.

In view of the above, Applicants respectfully request that the rejection of claims 25-29 under 35 USC §102(e) be withdrawn.

GINZBURG. Boris et al.

Serial No.:

10/608,143

Attorney Docket No.: P-5751-US

Assignee:

Intel Corporation

Claim Rejections Under 35 USC §103(a)

The Examiner rejected claims 7-9 and 19-21 under 35 USC §103(a) as being unpatentable over Larsson in view of Beach, United States Patent Application Publication Number 2003/0086443 ("the '443 Publication").

Without conceding the appropriateness of the combination, Applicants respectfully submit that the combination of Larsson and the '443 Publication does not meet the requirements of an obviousness rejection, in that the combination at least fails to teach or suggest all the elements of the claimed invention.

Claims 7-9 depend from independent claim 1, and claims 19-21 depend from independent claim 13. Each of amended independent claims 1 and 13 recites, inter alia, "transmitting during an awake mode of a wireless communication device one or more data packets sent for transmission during a power save mode of said wireless communication device" (emphasis added). Larsson and/or the '443 Publication, alone or in combination, do not disclose, teach or suggest at least this feature of independent claims 1 and 13.

Specifically, Larsson describes an access point which buffers data packets while a remote mobile terminal is hibernating (Larsson, column 4, lines 48-66; column 5, lines 4-10); and the '443 Publication describes an access point which buffers data packets while a mobile unit is in a power save mode (the '443 Publication, paragraphs 0017 and 0019). Therefore, Larsson and/or the '443 Publication, alone or in combination, describe, at most, a first wireless communication device (access point) which buffers data packets while another, different, wireless communication device (mobile unit) is in a power save mode. In contrast, independent claims 1 and 13 relate to a wireless communication device able to transmit, during its own awake mode, data packets sent for transmission during its own power save mode.

In view of the above, Applicants respectfully submit that Larsson and/or the '443 Publication, alone or in combination, do not render any of independent claim 1 and 13 obvious. Applicants further submit that the above-mentioned distinctions of amended independent claims 1 and 13 are significant and would not have been obvious at the time

GINZBURG, Boris et al.

Serial No.:

10/608,143

Attorney Docket No.: P-5751-US

Assignee:

Intel Corporation

the invention was made to a person having ordinary skill in the art, in view of any of the references on record, alone or in combination.

Claims 7-9 and claims 19-21 are dependent from amended independent claims 1 and 13, respectively, and include all the features of these amended independent claims as well as additional distinguishing features. Therefore, it is respectfully submitted that the patentability of claims 7-9 and claims 19-21 follows directly from the patentability of amended independent claims 1 and 13, respectively.

In view of the above, Applicants respectfully request that the rejection of claims 7-9 and 19-21 under 35 USC §103(a) be withdrawn.

The Examiner rejected claims 4 and 16 under 35 USC §103(a) as being unpatentable over Larsson in view of Liu et al., United States Patent Application Publication Number 2004/0190467 ("Liu").

Without conceding the appropriateness of the combination, Applicants respectfully submit that the combination of Larsson and Liu does not meet the requirements of an obviousness rejection, in that the combination at least fails to teach or suggest all the elements of the claimed invention.

Claim 4 depends from independent claim 1, and claim 16 depends from independent claim 13. Each of amended independent claims 1 and 13 recites, inter alia, "transmitting during an awake mode of a wireless communication device one or more data packets sent for transmission during a power save mode of said wireless communication device" (emphasis added). Larsson and/or Liu, alone or in combination, do not disclose, teach or suggest at least this feature of independent claims 1 and 13.

Specifically, Larsson describes an access point which buffers data packets while a remote mobile terminal is hibernating (Larsson, column 4, lines 48-66; column 5, lines 4-10); and Liu describes a mechanism to adjust wake-up times of mobile stations based on data priorities, data length, and data rates. Therefore, Larsson and/or Liu, alone or in combination, describe, at most, a first wireless communication device (access point) which buffers data packets while another, different, wireless communication device (mobile unit) is in a power save mode. In contrast, independent claims 1 and 13 relate to a wireless

GINZBURG, Boris et al.

Serial No.:

10/608,143

Attorney Docket No.: P-5751-US

Assignee:

Intel Corporation

communication device able to transmit, during its own awake mode, data packets sent for transmission during its own power save mode.

In view of the above, Applicants respectfully submit that Larsson and/or Liu, alone or in combination, do not render any of independent claim 1 and 13 obvious. Applicants further submit that the above-mentioned distinctions of amended independent claims 1 and 13 are significant and would not have been obvious at the time the invention was made to a person having ordinary skill in the art, in view of any of the references on record, alone or in combination.

Claims 4 and 16 are dependent from amended independent claims 1 and 13, respectively, and include all the features of these amended independent claims as well as additional distinguishing features. Therefore, it is respectfully submitted that the patentability of claims 4 and 16 follows directly from the patentability of amended independent claims 1 and 13, respectively.

In view of the above, Applicants respectfully request that the rejection of claims 4 and 16 under 35 USC §103(a) be withdrawn.

The Examiner rejected claims 12 and 24 under 35 USC §103(a) as being unpatentable over Larsson in view of the '588 Publication.

Without conceding the appropriateness of the combination, Applicants respectfully submit that the combination of Larsson and the '588 Publication does not meet the requirements of an obviousness rejection, in that the combination at least fails to teach or suggest all the elements of the claimed invention.

Claim 12 depends from independent claim 1, and claim 24 depends from independent claim 13. Each of amended independent claims 1 and 13 recites, *inter alia*, "transmitting during an awake mode of a wireless communication device one or more data packets sent for transmission during a power save mode of said wireless communication device" (emphasis added). Larsson and/or the '588 Publication, alone or in combination, do not disclose, teach or suggest at least this feature of independent claims 1 and 13.

Specifically, Larsson describes an access point which buffers data packets while a remote mobile terminal is hibernating (Larsson, column 4, lines 48-66; column 5, lines 4-

GINZBURG, Boris et al.

Serial No.:

10/608,143

Attorney Docket No.: P-5751-US

Assignee:

Intel Corporation

10); and the '443 Publication describes an access point which buffers data packets while a mobile unit is in a power save mode (the '588 Publication, paragraphs 0005 and 0006). Therefore, Larsson and/or the '588 Publication, alone or in combination, describe, at most, a first wireless communication device (access point) which buffers data packets while another, different, wireless communication device (mobile unit) is in a power save mode. In contrast, independent claims 1 and 13 relate to a wireless communication device able to transmit, during its own awake mode, data packets sent for transmission during its own power save mode.

In view of the above, Applicants respectfully submit that Larsson and/or the '588 Publication, alone or in combination, do not render any of independent claim 1 and 13 obvious. Applicants further submit that the above-mentioned distinctions of amended independent claims 1 and 13 are significant and would not have been obvious at the time the invention was made to a person having ordinary skill in the art, in view of any of the references on record, alone or in combination.

Claims 4 and 16 are dependent from amended independent claims 1 and 13, respectively, and include all the features of these amended independent claims as well as additional distinguishing features. Therefore, it is respectfully submitted that the patentability of claims 4 and 16 follows directly from the patentability of amended independent claims 1 and 13, respectively.

In view of the above, Applicants respectfully request that the rejection of claims 4 and 16 under 35 USC §103(a) be withdrawn.

The Examiner rejected claims 30-39 under 35 USC §103(a) as being unpatentable over the '588 Publication.

Specifically, the Examiner contended that the '588 Publication describes an apparatus comprising a buffer to store data packets during a power save mode and to transmit the data packets during an awake mode; but fails to describe an omni-directional antenna.

GINZBURG, Boris et al.

Attorney Docket No.: P-5751-US

Assignee:

Intel Corporation

Serial No.: 10/608,143

Applicants respectfully submit that the '588 Publication does not meet the requirements of an obviousness rejection, in that the '588 Publication at least fails to teach or suggest all the elements of the claimed invention.

Independent claim 30 recites, inter alia, "a buffer to store one or more data packets during a power save mode of said wireless communication device" and "a transmitter adapted to transmit said at least one data packet during an awake mode of said wireless communication device" (emphasis added). The '588 Publication does not disclose, teach or suggest at least this feature of independent claim 30.

Independent claim 36 recites, inter alia, "a first wireless communication device adapted to transmit during an awake mode of said first wireless communication device one or more data packets sent for transmission during a power save mode of said first wireless communication device" (emphasis added). The '588 Publication does not disclose, teach or suggest at least this feature of independent claim 36.

Specifically, the '588 Publication describes an access point which buffers data packets while a mobile unit is in a power save mode (the '588 Publication, paragraphs 0005 and 0006). Therefore, the '588 Publication describes, at most, a first wireless communication device (access point) which buffers data packets while another, different, wireless communication device (mobile unit) in a power save mode. In contrast, each of independent claims 30 and 36 relates to a wireless communication device able to transmit, during its own awake mode, data packets sent for transmission during its own power save mode.

In view of the above, Applicants respectfully submit that the '588 Publication does not render any of independent claims 30 and 36 obvious. Applicants further submit that the above-mentioned distinctions of amended independent claims 30 and 36 are significant and would not have been obvious at the time the invention was made to a person having ordinary skill in the art, in view of any of the references on record, alone or in combination.

Claims 31-35 and claims 37-39 are dependent from amended independent claims 30 and 36, respectively, and include all the features of these amended independent claims

GINZBURG, Boris et al.

Serial No.:

10/608,143

Attorney Docket No.: P-5751-US

Assignee:

Intel Corporation

as well as additional distinguishing features. Therefore, it is respectfully submitted that the patentability of claims 31-35 and claims 37-39 follows directly from the patentability of amended independent claims 30 and 36, respectively.

In view of the above, Applicants respectfully request that the rejection of claims 30-39 under 35 USC §103(a) be withdrawn.

Conclusion

In view of the foregoing amendment and remarks, and for at least the reasons discussed above, Applicants respectfully submit that claims 1-39 are deemed to be allowable. Their favorable reconsideration and allowance are respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this paper, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

No fees are believed to be due. However, if any fees are due, please charge any such fees to deposit account No. 50-3355.

Respectfully submitted

Naim Shichrur

Agent for Applicants Registration No. 56,248

Dated: July 11, 2005

Pearl Cohen Zedek Latzer, LLP 10 Rockefeller Plaza, Suite 1001 New York, New York 10020

Tel: (212) 632-3480 Fax: (212) 632-3489